STATE OF CALIFORNIA

Energy Resources Conservation and Development Commission

In the Matter of: The Application for Certification of the CHEVRON RICHMOND POWER PLANT REPLACEMENT PROJECT	Docket No. 07-SPPE-1

CONTRA COSTA BUILDING AND CONSTRUCTION TRADES COUNCIL DATA REQUESTS – SET TWO

October 19, 2007

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Attorneys for the
CONTRA COSTA BUILDING AND
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The following requests are submitted by the Contra Costa Building and Construction Trades Council. Please provide your responses within 30 days to the following people:

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Please identify the person who prepared your responses to each data request. If you have any questions concerning the meaning of any data request, please let us know.

1. PUBLIC HEALTH and WASTE MANAGEMENT: Contaminant Concentrations at Waste Units and Regulatory Status

Background

In response to CEC staff Data Request No, 81, requesting project status under jurisdiction of the California Regional Water Quality Control Board (RWQCB) or the Department of Toxics Substances Control (DTSC), the applicant stated:

> "The San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) has issued several Waste Discharge Board Orders (Board Orders) for the refinery for specific sites throughout the entire facility, but there are currently no specific Board Orders for the PPRP site"[1].

A review of the waste units identified in a 1993 Cleanup and Abatement Order[2] (No. 93-109) was conducted which compared the locations of the solid waste management units to areas proposed for construction. This comparison showed that construction activities have been proposed in areas where contamination was documented by the RWQCB in 1993 as follows:

Refinery Area	Renewal Project Component	Documented Soil Contaminants	Abatement Actions Initiated
Castro	New Maintenance Facilities	Chlordane, DDT, lead	Groundwater protection system and site cover
North Yard Sector	New Hydrogen Plant	Lead, arsenic	Removal of 300 cubic yds of soil
Pole Yard Tank Field	Four Replacement Tanks	Benzene, toluene, ethylbenzene, xylene and TPH	None indicated
S.P. Hill Tank Field	Two Replacement Tanks	Hydrocarbon contamination and hazardous concentrations of metals, primarily lead	Removal of free phase hydrocarbons
Office Hill Tank Field	Two Replacement Tanks (for Tanks 1451 and 1504)	Hydrocarbon contamination: Tank inspection records include historic evidence of possible releases from Tanks 1451 and 1504).	Groundwater extraction system installation

[1] Chevron's Response to Data Request No. 81.
[2] http://www.swrcb.ca.gov/rwqcb2/OrderNum/1993/93-109_20070221175020.pdf

As shown in the table above, the 1993 Cleanup and Abatement Order, which was incorporated into a 2000 Cleanup and Abatement Order[3] (No. 00-043), identifies areas of contamination that may not have been completely remediated in areas where construction is planned. A review of additional documentation shows that the RWQCB has identified 55 individual solid waste management units (areas of soil and groundwater contamination) at the Chevron Richmond refinery[4].

Although data was not available for the Castro, Pole Yard Tank Field, S.P. Tank Field and the Office Hill Tank Field, a recent report[5] included soil and groundwater sample results for the North Yard Sector (New Hydrogen Plant) which were summarized as flows:

- "40% of the samples exceeding the current Refinery re-use limits for either Total Petroleum Hydrocarbon (TPH)-gasoline or TPH-diesel
- 42% of the samples contained TPH concentrations that were within the current re-use limits
- 14% of the samples were designated as California hazardous waste
- 4% of the samples were designated as a Federal hazardous waste
- Groundwater occurred across the project site at shallow depths (1-4 feet below ground surface [bgs]), and free-phase liquid hydrocarbon (FPLH) was observed at nearly half of the locations
- Several groundwater samples contained TPH-diesel or TPH-gasoline in excess of the maximum allowable contaminant limits (MACLs) established for the Refinery."

Additionally, a recent report[6] identified contaminants in soil and groundwater at the proposed Cogen Plant which were summarized as follows:

- Eight of the 25 samples (32%) exceeded the current Refinery re-use limits for TPH (four from Sub-site A and four from Sub-site B)
- Two of the 25 samples (8%) exceeded the Title 22 State hazardous waste limits for metals (one from Sub-site A for total mercury and one from Sub-site B for soluble lead)

Whereas there may be no specific orders for these sites, the RWQCB maintains primacy for regulatory oversight for the Chevron Richmond

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[3] http://www.swrcb.ca.gov/rwqcb2/OrderNum/00-043.doc

[4] http://yosemite.epa.gov/r9/r9coract.nsf/92e28fb9e2f1a35a88256a72006760cb/b567d1069f33512388256ac5007d6682/$FILE/Chevron%20Refinery%20Richmond%20919%20+%2000.pdf

[5] Capital Projects: Hydrogen Plant Site Soil Pre-Characterization Results HW Job #: S2996, SAIC, April 28, 2006, p. 2.

[6] Capital Projects: COGEN Project Site Soil Pre-Characterization Results HW Job #: S2997, SAIC, May 9, 2006, p.1.

Refinery and the entire area of the refinery, including the PPRP site, is under active RWQCB oversight according to the terms of the 2000 Cleanup and Abatement Order. The RWQCB may at any time use enforcement authority to compel cleanup of contaminants that may pose a threat to beneficial uses of surface water and groundwater at and adjacent to the refinery.

Data Requests

1.a. Please provide a table that lists all solid waste management units or other waste units under jurisdiction of the RWQCB (and DTSC and U.S. EPA) within the footprint of all planned facilities and operational units of the PPRP.

1.b. Please identify the locations of the waste units on a map with respect to individual planned facilities and operational units of the PPRP.

1.c. Please document the current regulatory status of the waste units (i.e. undergoing Resource Conservation and Recovery Act ("RCRA") Corrective Action investigation, interim remedial measures).

1.d. Where soil contamination is present, please document concentrations of soil and groundwater contaminants and reference the contaminant concentrations to widely accepted regulatory agency screening levels including the U.S. EPA Region 9 Preliminary Remediation Goals[7], RWQCB Environmental Screening Levels[8] and California Human Health Screening Levels[9].

1.e. Please describe how soil excavation in areas of known contamination will be conducted to protect the health and safety of the construction workers, including provisions for dust monitoring and dust abatement.

2. PUBLIC HEALTH and WASTE MANAGEMENT: Management of Contaminated Groundwater Produced During Excavation

Background

Excavation and grading will result in the exposure of the groundwater table as follows in areas of planned construction:

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[7] http://www.epa.gov/region09/waste/sfund/prg/index.html
[8] http://www.swrcb.ca.gov/rwqcb2/esl.htm
[9] Use of California Human Health Screening Levels (CHHSLs) in Evaluation of Contaminated Properties. California Environmental Protection Agency. January 2005. http://www.calepa.ca.gov/Brownfields/documents/2005/CHHSLsGuide.pdf

	Hydrogen Plant	CCRR	CoGen	H2 Purity
Max. Excavation Depth (ft below grade)	6-ft	9-ft	6-ft	4-ft
Expect to encounter groundwater?	Yes	Yes	Yes	Yes
Dewatering required?	Yes	Yes	Yes	No
Expect to encounter free-phase HC?	Yes	Yes	Yes	No
Disposition of groundwater	Oily Water Sewer System	Oily Water Sewer System	Oily Water Sewer System	N/A
Expect to encounter contaminated soil?	Yes	Yes	No	No
Disposition of soil	Soil classified as hazardous will be transported offsite for proper disposal	Soil classified as hazardous will be transported offsite for proper disposal	NA	N/A

From Mark Piersante, in response to ESA Question Set No. 2, August 14, 2007 (Attachment 1)

The table above identifies that water contaminated with free-phase hydrocarbons (i.e. gasoline) will be encountered during excavation of the hydrogen plant, the CCRR plant and the CoGen facility. The contaminated groundwater along with the associated free-phase hydrocarbons will be pumped to dewater the site for construction of the planned facilities.

Data Requests

2.a. Please provide documentation to demonstrate that water to be produced from dewatering will be pretreated and discharged in compliance with all applicable permit requirements and regulations including Chevron Refinery's National Pollution Discharge Elimination System (NPDES) permit (SF-RWQCB Order 01-067).

2.b. Please identify how free-phase hydrocarbons that are expected to be produced during dewatering will be recovered to comply with the RWQCB's 2000 Cleanup and Abatement Order (No. 00-043), which states (at page 18):

> "Chevron shall perform recovery activities, as needed, to remove FPLH from beneath the refinery. The GPS, where present, is designed to function as a groundwater containment system that captures and prevents offsite migration of dissolved constituents; it is not intended to perform FPLH source control. FPLH recovery may be necessary to reduce the source for

dissolved constituents that are introduced via the free-phase. Chevron shall propose the methods to achieve this specification and the degree of cleanup but the proposal must be acceptable to the Executive Officer (see Provision C.5)."

2.c. Please clarify whether soils in the Cogen plant area are contaminated. The table above states that contaminated soils are not expected to be encountered; however, this is contradictory to the information included in the report prepared for the Cogen Plant that documented eight of the 25 samples (32%) exceeded the current Refinery re-use limits for TPH and two of the 25 samples (8%) exceeded the Title 22 State hazardous waste limits for metals.[10]

3. AIR QUALITY: PSD Compliance for PM2.5

Background

In 1997, the United States Environmental Protection Agency ("EPA") issued a National Ambient Air Quality Standard for PM2.5. 62 Fed. Reg. 38652-01 (July 18, 1997). According to the Bay Area Air Quality Management District ("BAAQMD"), the Bay Area Air Basin is in attainment of the annual arithmetic mean and is unclassified for the twenty-four hour average. Based on this attainment status, the Project's PM2.5 emissions are subject to the federal Clean Air Act's ("Act") Prevention of Significant Deterioration requirements.

More specifically, under the Act's preconstruction review requirements, Best Available Control Technology ("BACT") must be applied to "each pollutant subject to regulation under [the Act]." 42 U.S.C §§ 7475(a)(4), 7479(2)(C). There is no doubt that PM2.5 is subject to regulation under the Act. In fact, the EPA has actually issued regulations on the pollutant. 62 Fed. Reg. 38652-01 (July 18, 1997); 72 Fed. Reg. 20586-01 (April 25, 2007).

The Act's preconstruction review provisions also require ambient air quality modeling of PM2.5. *Id.* at §§ 7475(a)(3); 7475(a)(5) (relating to protection of Class I areas).

Although the EPA issued a memorandum on the subject in 1997, which suggested that a PM10 analysis (such as the one conducted by Chevron in its application for an SPPE), could serve as a proxy for PM2.5 (I*nterim Implementation of New Source Review for PM2.5* (Oct. 23, 1997)), a more recent memorandum clarified this issue further. Specifically, this recent 2005 memo from the EPA stated that using PM10 as a proxy for PM2.5 would

[10] Capital Projects: COGEN Project Site Soil Pre-Characterization Results HW Job #: S2997, SAIC, May 9, 2006, p. 1.

only be acceptable to the EPA until it issued an implementing regulation on PM2.5. *Implementation of New Source Review Requirements in PM2.5 Nonattainment Areas* (April 5, 2005). The EPA issued such an implementing regulation in April of 2007, which became effective the next month, on May 29, 2007. 72 Fed. Reg. 20586-01 (April 25, 2007). Thus, PM10 can no longer be used as a proxy for PM2.5 under the Act.

Data Requests:

3.a. Please conduct a top-down BACT analysis for all Project components that will emit PM2.5.

3.b. Please conduct ambient air quality modeling for PM2.5 as required by all the relevant subsections of 42 U.S.C. § 7475(a).

3.c. Please explain how the Project's PM2.5 emissions will be mitigated. If mitigation will occur through the use of offsets, please demonstrate that those offsets are enforceable, surplus, quantifiable and real. Please also describe those offsets with specificity, including how and when they were generated.

Dated: October 19, 2007

Respectfully submitted,

_____/s/_____

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Declaration of Service

I, Bonnie Heeley, declare that on October 19, 2007, I deposited copies of the attached CONTRA COSTA BUILDING AND CONSTRUCTION TRADES COUNCIL DATA REQUESTS – SET TWO via email or U.S. mail as follows:

Via U.S. Mail

CALIFORNIA ENERGY COMMISSION
DOCKET UNIT
Attn: Docket No. 07-SPPE-1
1516 Ninth Street, MS-4
Sacramento, CA 95814-5512

Via email:

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I declare under penalty of perjury that the foregoing is true and correct. Executed at South San Francisco, California, on October 19, 2007.

_____/s/_____
Bonnie Heeley